

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/EP2004/050505

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 E21B23/10 E21B33/16 F16L55/38 B08B9/04

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 E21B F16L B08B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 1 683 429 A (EDWARD WALKER) 4 September 1928 (1928-09-04) page 2, column 1, lines 7-24 figures 4,6	1,2,5
X	US 5 966 768 A (HAHN ROBERT B) 19 October 1999 (1999-10-19) abstract figure 9	1,2,5
A	US 2001/047811 A1 (SIVACOE ORLANDE) 6 December 2001 (2001-12-06) figure 5C	1
A	NL 8 402 419 A (JOCHIM VAN BEUGEN) 3 March 1986 (1986-03-03) figures 1-6	1
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

### \* Special categories of cited documents :

\*A\* document defining the general state of the art which is not considered to be of particular relevance

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\*O\* document referring to an oral disclosure, use, exhibition or other means

\*P\* document published prior to the international filing date but later than the priority date claimed

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\*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

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\*Z\* document member of the same patent family

Date of the actual completion of the international search

22 July 2004

Date of mailing of the international search report

29/07/2004

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>US 3 605 159 A (GIRARD HARRY J) 20 September 1971 (1971-09-20) the whole document</p> <p>-----</p>	1

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP2004/050505

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
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